#### CONTRACT NO. 09-209-800134

#### TIMBER SALE PREPARATION CONTRACT

## PROJECT DESCRIPTION

SUPERVISOR AREA: EASTERN IDAHO

PROJECT NAME: SWAMPY DRAW SALE PREPARATION

PROJECT NUMBER: 80-0134-500-09

LOCATION: State endowment lands in eastern Idaho, near Spencer, Clark County,

Idaho. The area is 16 air miles north of Dubois (see vicinity map).

PROJECT ACRES: 296

Unit	Subdivision	Section	Township	Acres	No. of
			& Range		Cruise
					Plots
1	Pts. NW	36	13N/35E	30	15
2	Pts. W2NW, Pts. NWSW	36	13N/35E	22	11
3	Pts. E2NW, Pts. SWNW, Pts. N2SW	36	13N/35E	52	26
4	Pts. W2SW	36	13N/35E	25	13
5	Pts. S2SW	36	13N/35E	11	6
6	Pts. SWNE, Pts. SENW, Pts. E2SW, Pts. W2SE	36	13N/35E	59	30
7	Pts. W2NE, Pts. W2SE, Pts. SESE	36	13N/35E	37	18
8	Pts. N2SE, Pts. SESE	36	13N/35E	32	16
9	Pts. NENE, Pts.S2NE, Pts. N2SE	36	13N/35E	28	14
				296	149

# STAND DESCRIPTION AND HISTORY

The project area consists of even aged stands of Douglas-fir. Aspen is common throughout the stands. Ground cover is primarily pinegrass with scattered low shrubs.

The basal area ranges from 10 square feet per acre (in aspen patches) to over 140 square feet per acre. The elevation ranges from 7200 feet to 7700 feet. The slope ranges from 5 to 55 percent with an average slope of 35 percent.

The area is leased for cattle grazing. The area receives minimal recreational use; as there is no public road access to this section. There are no records of timber sales in the area; however there is evidence of past harvesting on this section.

## **CONTACT WORK TO BE PREFORMED**

- A. Mark leave trees within sale units, leave tree marking prescriptions and requirements are listed under <u>Silvicultural Prescription and Technical Specifications</u>.
- B. Install variable plot cruise plots using a 20/90 Big Basal Area cruising method. Cruise plots will be installed; one plot for every 2 acres. Contactor will provide, to the State, a copy of the paper field cruise sheets. Contractor is encouraged to use the comments column on the field cruise sheets to provide such information as cause of defect, attributes of the plot, or any items worth

noting. Contractor will mark locations of cruise plots and cruise lines on a map. Cruise details are listed under <u>Silvicultural Prescription and Technical Specifications</u>.

# **CONTRACT PERIOD**

- A. Within 10 days of being awarded the contact, the Contactor will notify the Eastern Idaho Area Office of the proposed work schedule and arrange a pre-work conference.
- B. Contact work may commence once the Contactor has signed a copy of the contract, and has had a pre-work conference.
- C. Field work must be completed by September 30, 2009. The contact will expire November 30, 2009.

## **PAYMENT**

The contactor may request payment, after July 1, 2009, when any 2 units are completed. Payment shall be made on the satisfactory completion of all work for each unit as per the master contact terms and specifications, and this project description. Payment to be made at the rate(s) set forth in Schedule A attached hereto.

## INSPECTION AND ACCEPTANCE

- A. Compliance Inspection: The State determines by formal inspection if work is completed according to contract specifications. Failure to complete work as specified requires prompt corrective action. Repeated failure to follow and implement contract specifications may result in termination of the contractor's right to proceed and the contract considered in default.
- B. Inspection Procedure: The State makes periodic inspections while work is in progress to ensure that work is satisfactory. These inspections may initially occur daily and vary if work progresses in a satisfactory manner.
  - 1. Compliance inspections are made at random plots and points. State personnel inspect a minimum of 10 percent of the cruise plots. State personnel inspect a minimum of 1 point for every five acres of marking, using a 20 BAF variable plot.
  - 2. The minimum acceptable standard for satisfactory work is described in the master contact.

# SILVICULTURAL PRESCRIPTION AND TECHNICAL SPECIFIACTIONS

## A. TIMBER MARKING

- 1. Marking Description and Objectives
  - Remove over mature and suppressed smaller conifer trees to reduce crowding.
    Aspen trees are not to be marked and are not considered in the Basal Area (BA) reserve calculations.
  - b. Leave a shelterwood of trees to a uniform density of 60 square feet of BA; one exception to the 60 square feet of BA is where the trees are naturally lumped together, marking of 40 square feet of BA will be required to avoid having trees spaced closer than fifteen (15) feet.
- 2. Selection of Leave Trees

Reserve trees shall be selected and marked with orange paint using the following criteria:

- a. Mark trees showing signs of good growth and form in comparison to surrounding trees of similar age. These trees are typically co-dominant or intermediate in the canopy. Species diversity is desired; however health and vigor take precedence.
- b. Select trees in the 11 to 14 inch DBH range. Leave trees will have a live top with at least 40 percent live crown. Leave trees will be free of insects and disease, have no physical damage, have good form, active growth and a healthy appearance.
- c. In some cases it may be necessary to mark suppressed or defective (slight sweep, forks) trees in order to meet the required BA. Trees with certain types of growth defects may be marked when better trees are not available. Mark the best tree which will provide site protection, cone production and longevity.
- d. Marking Bearing Trees and wildlife trees.
  - i. Bearing trees referencing section and quarter corners shall be marked as leave trees.
  - ii. Trees with raptor nests shall be marked as leave trees.
- e. It will be acceptable to mark 40 square feet of BA when conditions outlined in Selection of leave trees items c. and d. cannot be met.
- 3. Paint Application: In addition to the requirements of the master contract section titled Timber Marking Requirements," opposing stump marks will be painted on the uphill and the downhill sides of the stump.

#### B. TIMBER CRUISING

- 1. Cruise design will use a 4.5 chain by 4.5 chain (1 chain = 66 feet) grid system, yielding at least one plot per two acres. Run all cruise lines in the cardinal directions (N, S, E, W) using a 14° E declination.
- 2. Fill out the heading of each field, name of cruise (sale name), unit, date, cruiser(s), BAF, etc. on each field cruise sheet.
- 3. Flag cruise lines and plots with yellow ribbon.
- 4. Flag the start and end of cruise lines at the unit boundary. Record the distance and direction to the next plot on a ribbon with permanent black marker and on field cruise sheets, if used. Flag cruise lines at sight intervals between plots. Extend cruise lines past the last plot on the line to the unit boundary. Record on cruise plot map all natural or manmade features encountered, e.g., springs, seeps, creeks, meadows, rock outcrops, old skid trails or logging roads, flagged or painted centerline for a proposed road, etc.
- 5. Start plots 1 chain in from the unit boundary.
- 6. Cruise all merchantable trees. A merchantable tree is defined as at least 8 inches DBH, with one 16-foot log at a 6-inch top and at least 33 1/3 percent sound. For this project do not cruise dead trees; paint an "X" on any dead tree that is on the variable plot and record the number of dead trees on the field cruise sheets. If no trees above 8 inches DBH are on the variable plot, write "NT" on field cruise sheets. Do not leave blank spaces. Count trees can be grouped on a single line by species, and cut or leave, and indicate the number of trees in each count class.
- 7. If the plot has any trees that are physically outside the unit boundary, move the plot in ½ chain increments, opposite the direction of travel, until all tallied trees are within the unit.
- 8. Hang a ribbon above plot center with the plot number and transect line written in permanent black marker. Plot center may be marked with a ribbon tied to a short stick that is pushed firmly into the ground.

- 9. Paint a number in white on each tree cruised. Locate the number at breast height on the side facing plot center. Begin numbering with tree #1 at north and proceed clockwise. Plot numbering will be a 3 digit number, the first number will be the unit number and the second 2 numbers will be the plot number. For example plot 3 in Unit 1 would be painted "103" or plot 16 in Unit 9 would be painted "916". Paint the plot number below the tree number on tree #1. For example, tree #1 of plot 28 in Unit 7 will be painted "1/728".
- 10. Indicate reserve (a.k.a. leave) trees with an "R" and cut trees with a "C" in the "C/L" column on the field cruise sheet.
- 11. Defect tallied trees as follows and as verbally instructed.
  - a. If a crack or check shows, defect at 25% of the length, for each face it is on, i.e., for an 8 foot check, showing on one face, defect at 25% of an 8 foot piece, or 2 feet. If checks spiral or appear on 3 or more faces, cull the segment where located.
  - b. Cull catfaces according to the following criteria: trees above 18" diameter with catface less than ¼ the diameter in depth cull 50% of the log up to 4 feet above visible seam; trees above 18" diameter with catface more than ¼ the diameter in depth cull 100% of the log up to 4 feet above visible seam; trees below 18" diameter with catface less than ¼ the diameter in depth cull 50% of the log up to 2 feet above visible seam; trees below 18" diameter with catface more than ¼ the diameter in depth cull 100% of the log up to 2 feet above visible seam.
  - c. Defect will be recorded as one total percentage of tree volume.

BF Defect 6" Top (Log Tops) – 16.5 Plus 1' Stump

Merch	Num	1 <sup>st</sup> log	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	$7^{\text{th}}$	8 <sup>th</sup>
Height	of	(17)	Log						
	Logs		(34)	(50)	(67)	(83)	(100)	(116)	(133)
1-25	1	100/6.3							
26-42	2	70/4.4	30/1.9						
43-58	3	55/4.4	33/2.1	12/.8					
59-75	4	47/2.9	31/1.9	16/1	6/.4				
76-91	5	42/2.6	30/1.9	18/1.1	8/.5	2/.1			
92-	6	37/2.3	28/1.8	19/1.2	10/.6	5/.3	1/.1		
108									
109-	7	29/1.8	26/1.6	20/1.3	13/.8	7/.4	3/.2	2/.1	
124									
125 +	8	27/1.7	23/1.4	20/1.3	14/.9	9.6	5/.3	1/.1	1/.1

A/B A=Total % of volume of tree in log; B= % volume per foot for log

- e. Only seen defect will be recorded as part of the total percentage. Cruiser will not make any assumptions of unseen defect.
- 12. Snags are standing dead trees that would not have value as house logs or questionable for firewood in a subsequent timber sale. Snags typically have exposed dry wood, woodpecker holes, few, if any, branches and a broken off top. Little to no bark is present in most cases. For a snag that falls within a cruise plot, paint a "Z" on the tree.
- 13. Record tree DBH to the nearest whole inch on cruise sheets. Observe the following rules when rounding tenths of inches to whole inches: 4 tenths of an inch or less, round <u>down</u>, i.e., 8.4" reads 8.0" on the field sheet; 5 tenths of an inch and greater, round <u>up</u>, i.e., 8.5" reads 9.0" on the field sheet. IMPORTANT: This rule does not apply to trees less than 8.0 inches DBH. In order to be recorded under the variable plot column, a tree must measure 8.0 inches DBH or greater.

- 14. Use the appropriate slope correction factor on slopes greater than 10%. This is used when measuring limiting distances and horizontal distances for height estimation.
- 15. Each unit must have a minimum of 10 measured cut trees. Upon completion of a unit, the cruiser will verify that 10 cut trees have been measured. If there are fewer than 10 measured cut trees in a unit, the contactor will use the following methods to select additional cut trees:
  - a. First, use the first plot in a unit that does not already have a measure tree and select the first cut tree from north as the measure tree. Continue through the unit to plots without any measure trees until the unit has 10 measure trees.
  - b. Second, return to plots with the least number of measure trees and follow the above guidelines for measure tree selection.

Additional information on the above project can be obtained from the following address:

Idaho Department of Lands Eastern Idaho Area Office 3563 Ririe Highway Idaho Falls, ID 83401

Phone: (208) 525-7167



# Vicinity Map





